

TECHNIQUES FOR PROVIDING
MULTIPLE COMMUNICATIONS PATHWAYS

ABSTRACT OF THE DISCLOSURE

- 5 A communications assembly includes a transmitter configured to receive a first electrical input signal and a second electrical input signal, and to provide a light signal having (i) light modulation based on the first electrical input signal and (ii) average power over time based on the second electrical input signal. The communications assembly further includes a receiver configured to receive the light signal and to provide
- 10 (i) a first electrical output signal based on the light modulation of the light signal and (ii) a second electrical output signal based on the average power of the light signal over time. The communications assembly further includes an optical fiber interconnecting the transmitter with the receiver to convey the light signal from the transmitter to the receiver. Accordingly, the communications assembly provides a robust and reliable
- 15 mechanism for providing multiple communications pathways using a single light signal through a single optical fiber.